

FIG. 1 (PRIOR ART)

FIG. 2

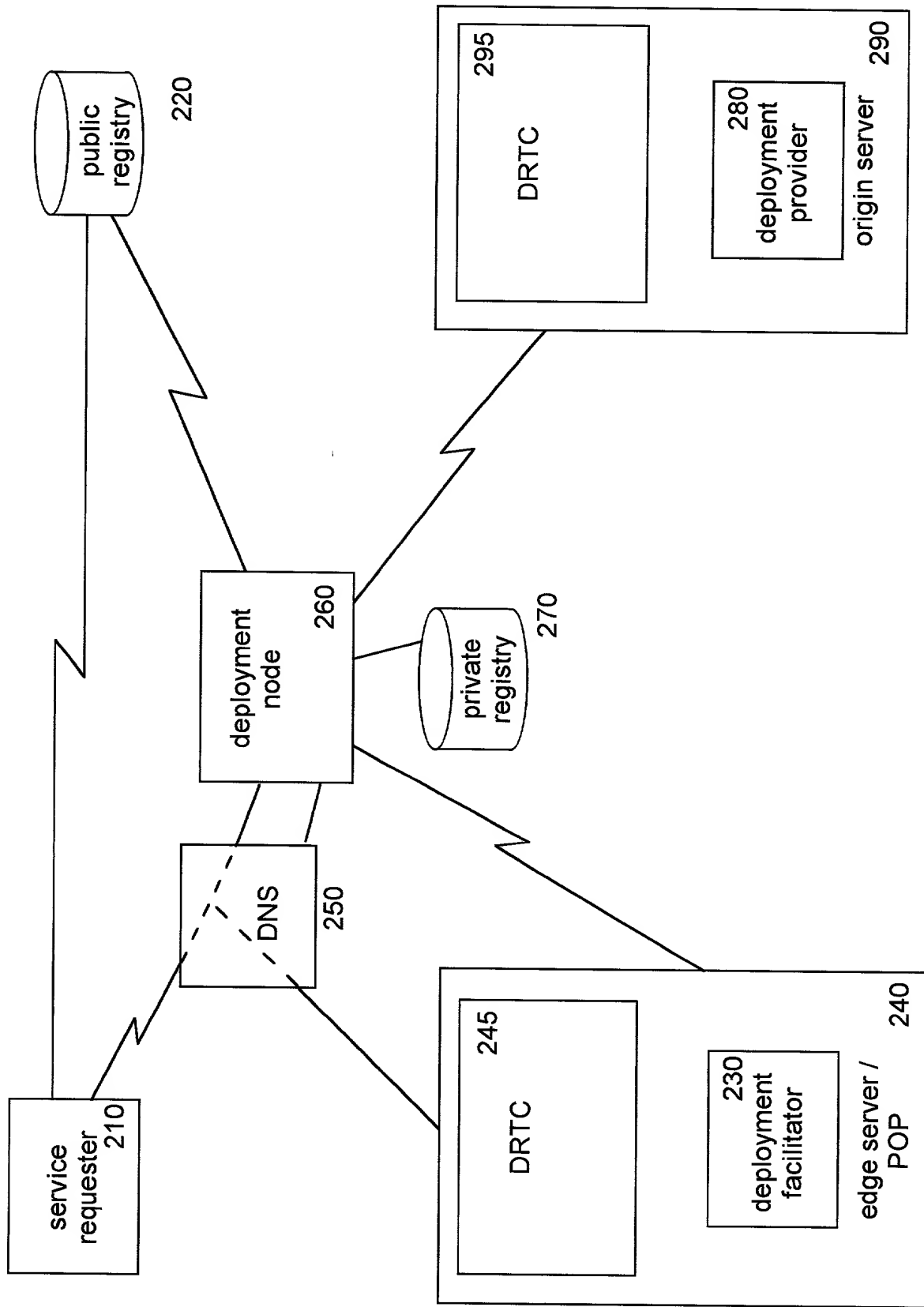


FIG. 3

300

UDDI Binding Key	POP	Usage Counter
xxx	San. Fran.	100
xxx	NYC	33

FIG. 4

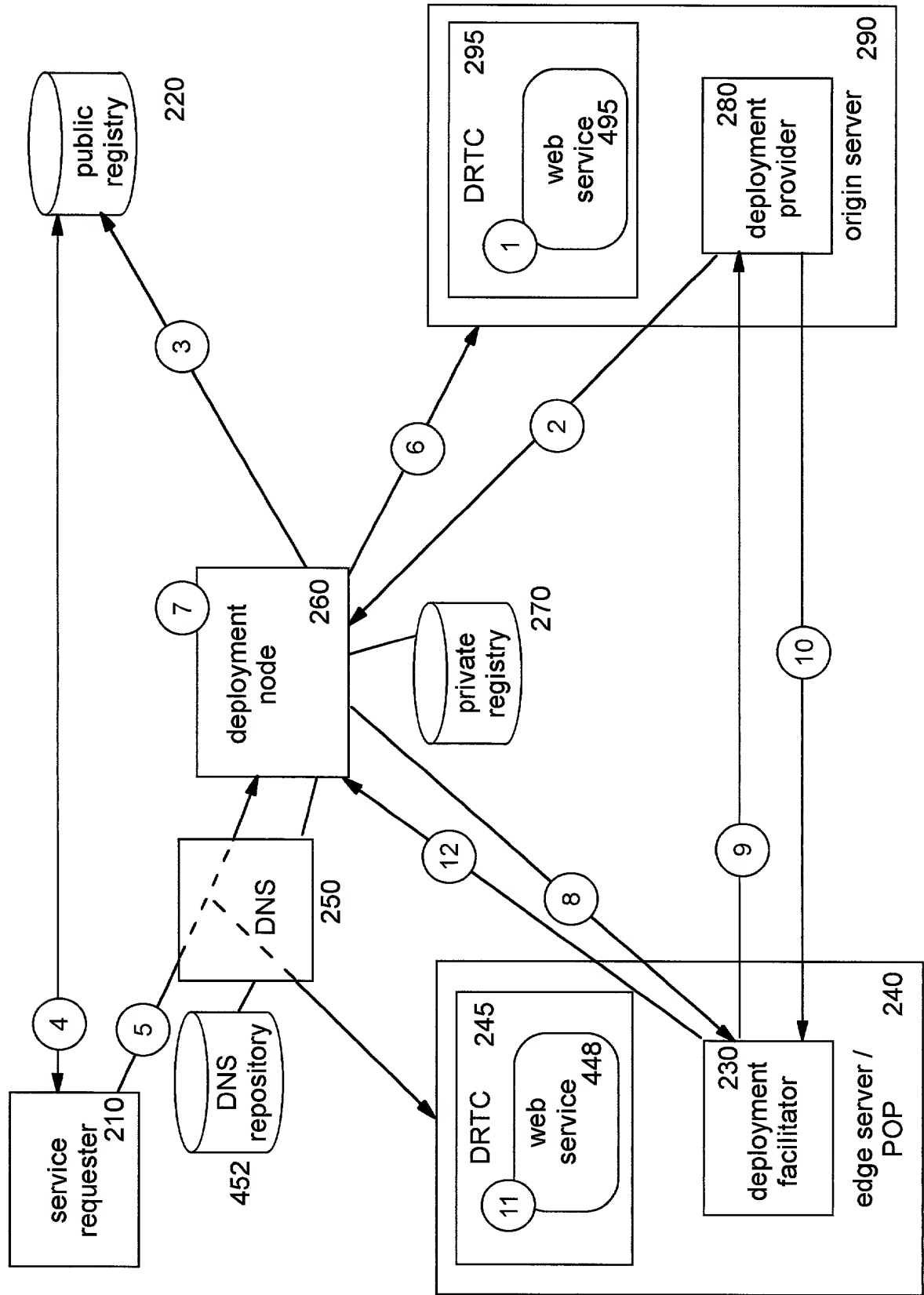


FIG. 5A

<?xml version="1.0"?> 510
<definitions name="Deployment-interface"
 targetNamespace="http://www.acme.com/Deployment-interface"
 xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
 xmlns:xsd1="http://www.acme.com/deploy/schema"
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
 xmlns="http://schemas.xmlsoap.org/wsdl/">

 <types>
 <schema targetNamespace="http://www.acme.com/deploy/schema"
 xmlns="http://www.w3.org/2000/10/XMLSchema">
 <element name="ArchiveRef">
 <attribute name="href" type="uriReference"/>
 </element>
 <complexType name="ArrayOfBinary">
 <complexContent>
 <restriction base="soapenc:Array">
 <attribute ref="soapenc:arrayType" arrayType="xsd:binary[]"/>
 </restriction>
 </complexContent>
 </complexType>
 </schema>
 </types>

 <message name="DeploymentRequest">
 <part name="serviceName" type="xsd:string"/>
 <part name="runtimeEnvironment" type="xsd:string"/>
 </message> 520

 <message name="DeploymentResponse">
 <part name="archiveRef" element="xsd1:ArchiveRef"/>
 <part name="serviceArchive" type="xsd1:ArrayOfBinary"/>
 </message> 530

FIG. 5B

```
<portType name="DeploymentProvider">
540 <operation name="getDeployedService">
    <input message="tns:DeploymentRequest"/>
    <output message="tns:DeploymentResponse"/>
</operation>
</portType>

<binding name="DeploymentProviderBinding" type="tns:DeploymentProvider">
    <soap:binding style="rpc"
        transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="getDeployedService">
        <soap:operation soapAction="http://www.acme.com/deploy"/>
        <input>
            <soap:body use="encoded"
                namespace="urn:www.acme.com:deploy"
                encodingStyle="http://schemas.xmlsoap.org/soap/encoding/" />
        </input>
        <output>
            <mime:multipartRelated>
            <mime:part>
                <soap:body parts="archiveRef" use="literal"
                    namespace="urn:www.acme.com:deploy"/>
            </mime:part>
            <mime:part>
                <mime:content part="serviceArchive"
                    type="application/octet-stream"/>
            </mime:part>
            </mime:multipartRelated>
        </output>
    </operation>
</binding>
</definitions>
```

560

550

FIG. 5B

FIG. 5C

```
<?xml version="1.0"?>
<definitions name="Deployment"
  targetNamespace="http://www.acme.com/Deployment"
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:interface="http://www.acme.com/Deployment-interface"
  xmlns="http://schemas.xmlsoap.org/wsdl/">

  <import namespace="http://www.acme.com/Deployment-interface"
    location="http://www.acme.com:80/services/Deployment-interface.wsdl"/>

  <service name="DeploymentProvider">
    <documentation>Acme.Com Deployment Service</documentation>
    <port name="DeploymentProvider" binding="interface:DeploymentProviderBinding">
      <soap:address location="http://www.acme.com:80/soap/servlet/rpcrouter"/>
    </port>
  </service>
</definitions>
```

FIG. 6

POST /ServiceDeployment HTTP/1.1
Host: www.acme.com
Content-Type: text/xml; charset="utf-8"
Content-Length: nnnn
SOAPAction: "http://www.acme.com/deploy"

```
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
  <SOAP-ENV:Body>
    <m:getDeployedService xmlns:m="urn:www.acme.com:deploy">
610  <serviceName>urn:www.acme.com:stockquoteservice</serviceName>
620  <runtimeEnvironment>Windows 2000, Apache SOAP V2.1,
      Java</runtimeEnvironment>
    </m:getDeployedService>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

FIG. 6

FIG. 7

HTTP/1.1 200 OK

MIME-Version: 1.0

Content-Type: Multipart/Related; boundary=MIME_boundary; type=text/xml;
start="<http://www.acme.com/deployment061400a.xml>"

Content-Description: This is the optional message description.

--MIME_boundary

Content-Type: text/xml; charset=UTF-8

Content-Transfer-Encoding: 8bit

Content-ID: <http://www.acme.com/deployment061400a.xml>

Content-Location: http://www.acme.com/deployment061400a.xml

<?xml version='1.0' ?>

<SOAP-ENV:Envelope xmlns:SOAP-ENV="

http://schemas.xmlsoap.org/soap/envelope/">

<SOAP-ENV:Body>

<m:getDeployedServiceResponse xmlns:m="urn:www.acme.com:deploy">

710 <ArchiveRef href="http://www.acme.com/com/foo/stockquoteservice.ear" />

</m:getDeployedServiceResponse>

...

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>

--MIME_boundary

Content-Type: application/octet-stream

Content-Transfer-Encoding: binary

720 Content-ID: <http://www.acme.com/com/foo/stockquoteservice.ear>

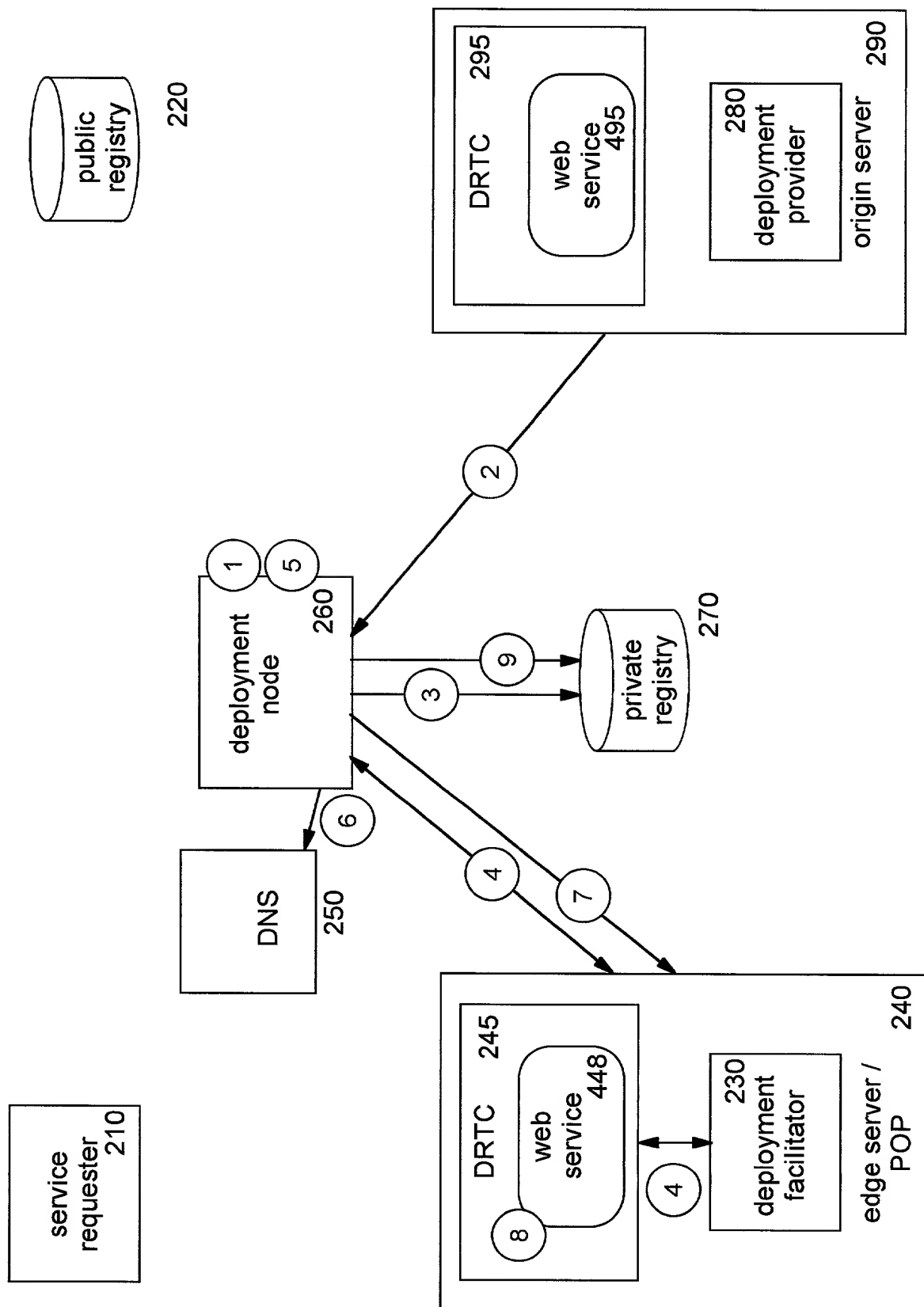
Content-Location: http://www.acme.com/foo/stockquoteservice.ear

730 ... binary EAR file ...

--MIME_boundary--

FIG. 7

FIG. 8



900

FIG. 9

Deployed Service	Deployed to
xxx	1.2.3.4
xxx	4.3.2.1
yy	1.2.3.4
zzz	5.6.7.8

FIG. 10

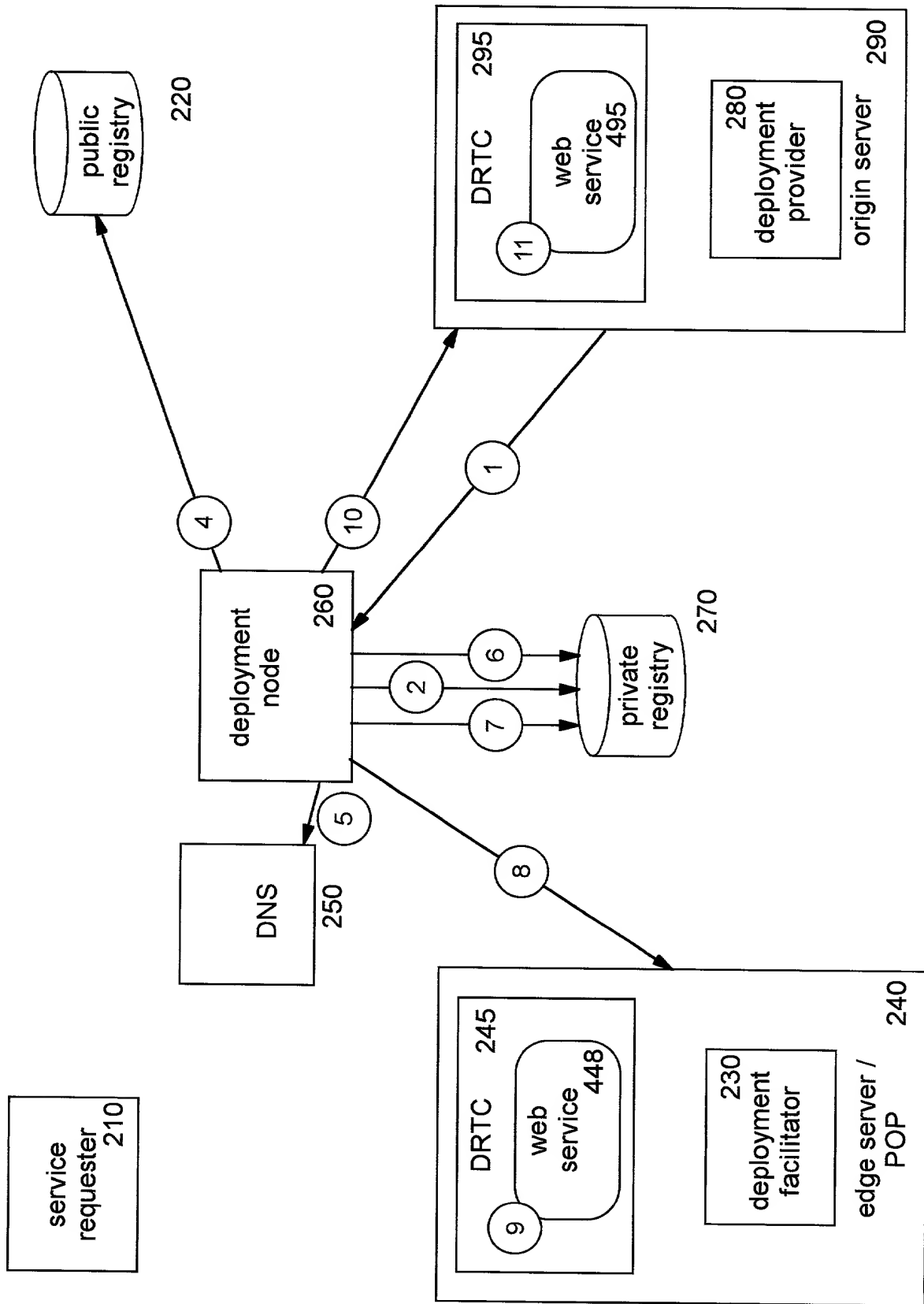


FIG. 11

